

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3561 - L2 Version 3
Chandra X-Ray Center

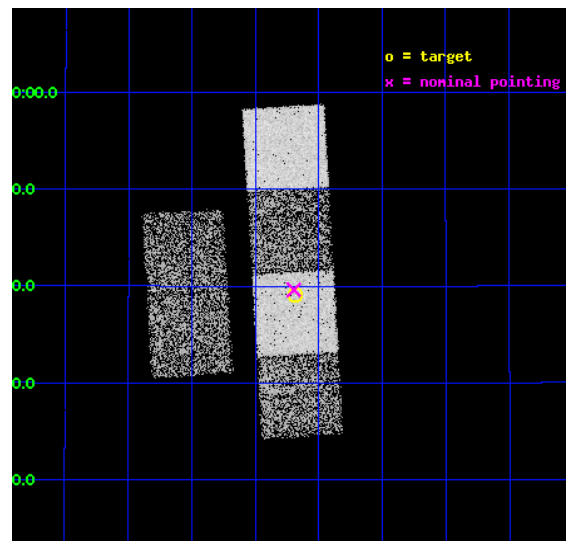
L2 Processing Date : Oct 18 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.5 | FID Slots | 13 |
| 2.5.1 | Slot 0 | 13 |
| 2.5.2 | Slot 1 | 14 |
| 2.5.3 | Slot 2 | 15 |
| A | Summary | 16 |
| A.1 | Status | 16 |
| A.2 | Comments | 16 |

1 Front

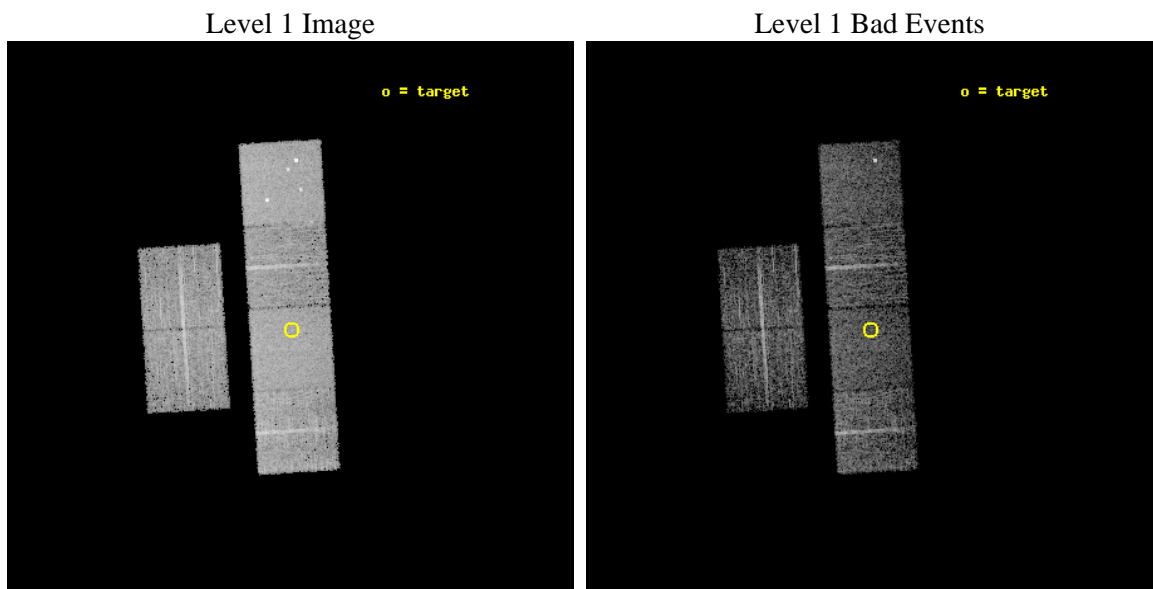
| | | |
|----------|--|---|
| seq_num | 700623 | Sequence number |
| obs_id | 3561 | Observation id |
| title | A CHANDRA SURVEY OF LUMINOUS, RADIO-DETECTED QUASARS AT $Z > 4$ | Prop |
| observer | Professor Gordon Garmire | Principal investigator |
| object | FIRST 0747+2739 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 116.796667 | Observer's specified target RA [deg] |
| dec_targ | 27.651 | Observer's specified target Dec [deg] |
| ra_nom | 116.79916354024 | Nominal RA [deg] |
| dec_nom | 27.660384646014 | Nominal Dec [deg] |
| roll_nom | 86.573073045461 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 5023.9999812841 | Sum of GTIs [s] |
| livetime | 4960.3830684315 | Livetime [s] |
| ontime2 | 5023.9999812841 | Sum of GTIs [s] |
| ontime3 | 5023.9999812841 | Sum of GTIs [s] |
| ontime5 | 5023.9999812841 | Sum of GTIs [s] |
| ontime6 | 5023.9999812841 | Sum of GTIs [s] |
| ontime7 | 5023.9999812841 | Sum of GTIs [s] |
| ontime8 | 5023.9999812841 | Sum of GTIs [s] |
| l2events | 50322 | Number of level 2 events |



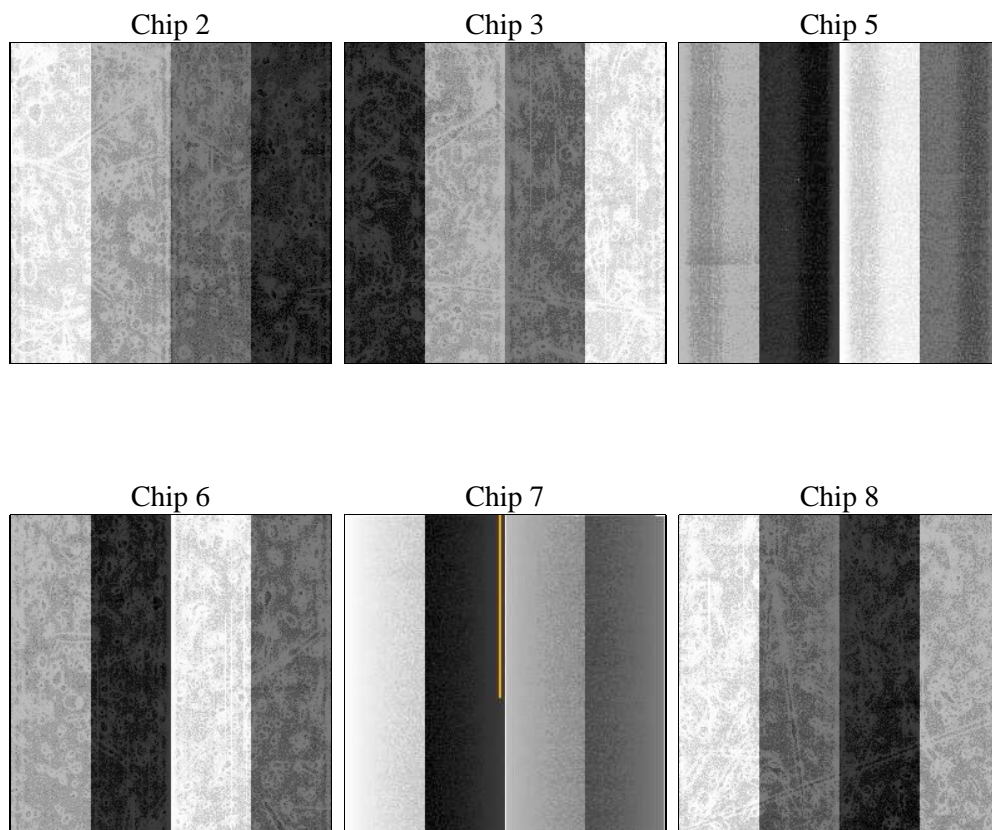
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 5000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 5023.9999812841 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime2 | 5023.9999812841 | Sum of GTIs [s] |
| date | 2012-10-18T11:32:21 | Date and time of file creation | ontime3 | 5023.9999812841 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 5023.9999812841 | Sum of GTIs [s] |
| | | | ontime6 | 5023.9999812841 | Sum of GTIs [s] |
| | | | ontime7 | 5023.9999812841 | Sum of GTIs [s] |
| | | | ontime8 | 5023.9999812841 | Sum of GTIs [s] |
| | | | l1events | 238657 | Number of level 1 events |

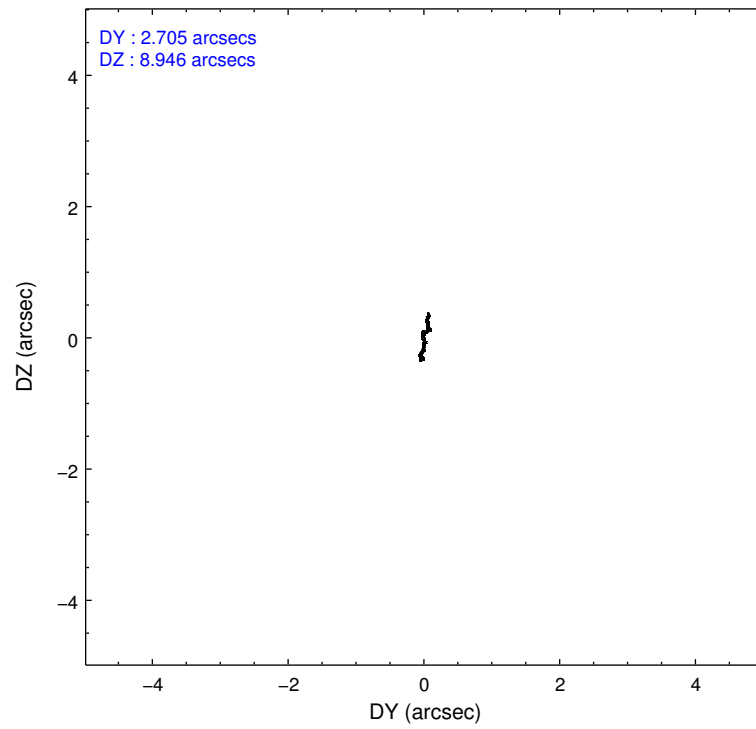
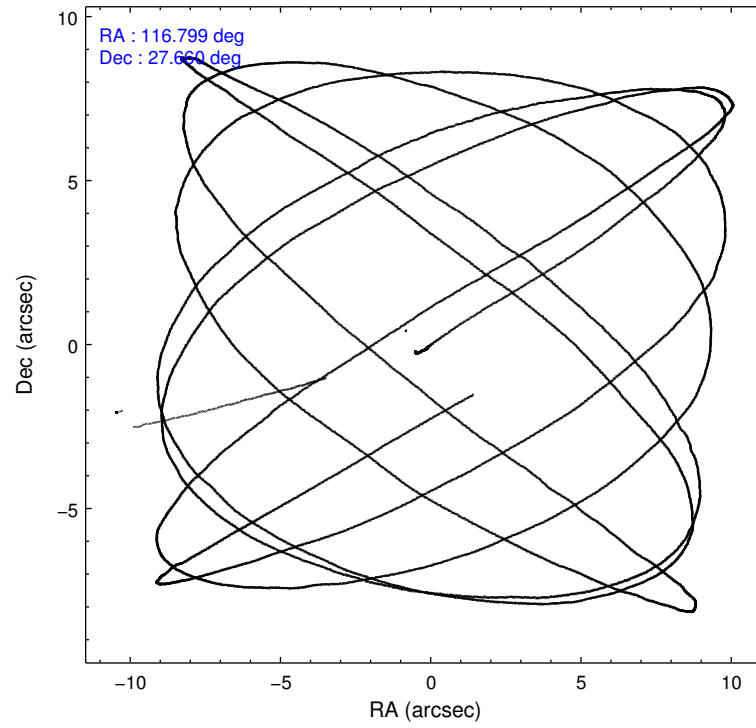
2.1.4 Events

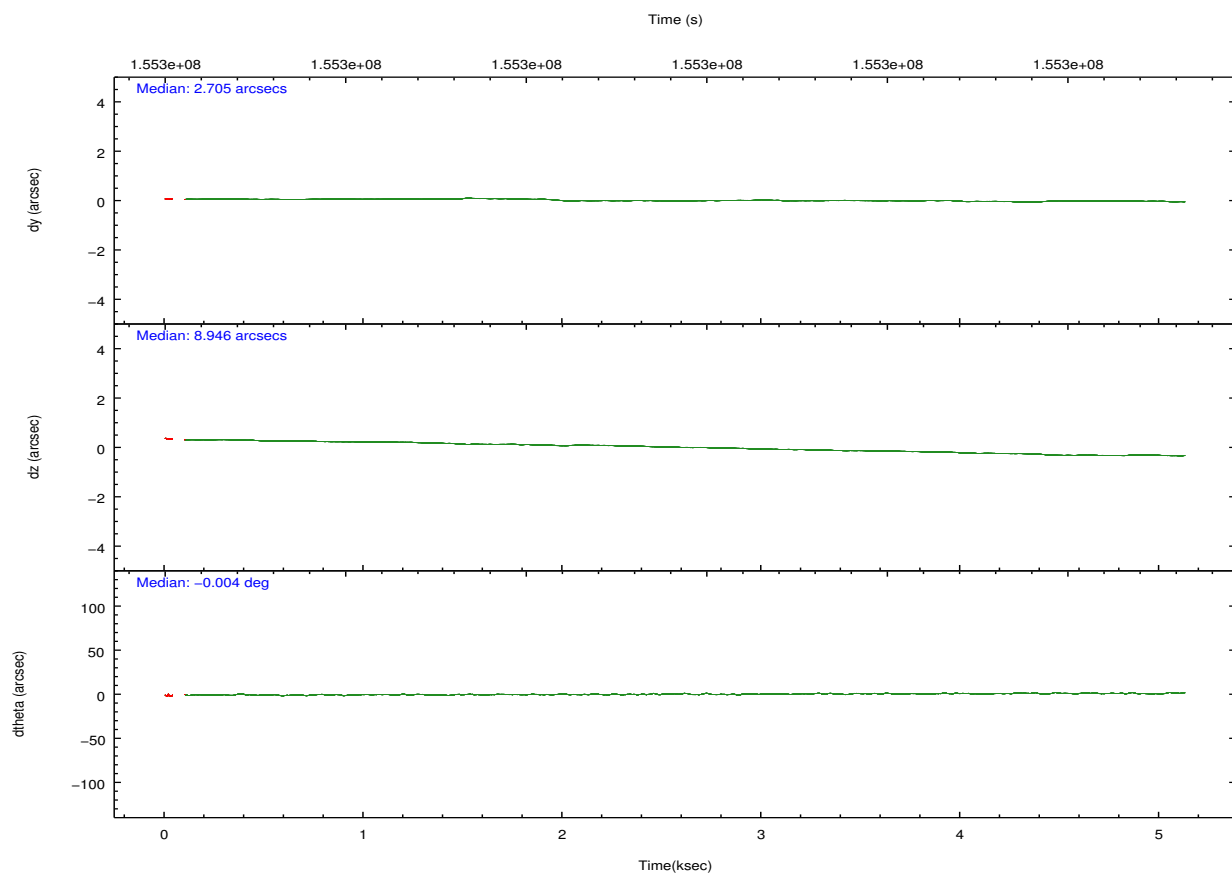
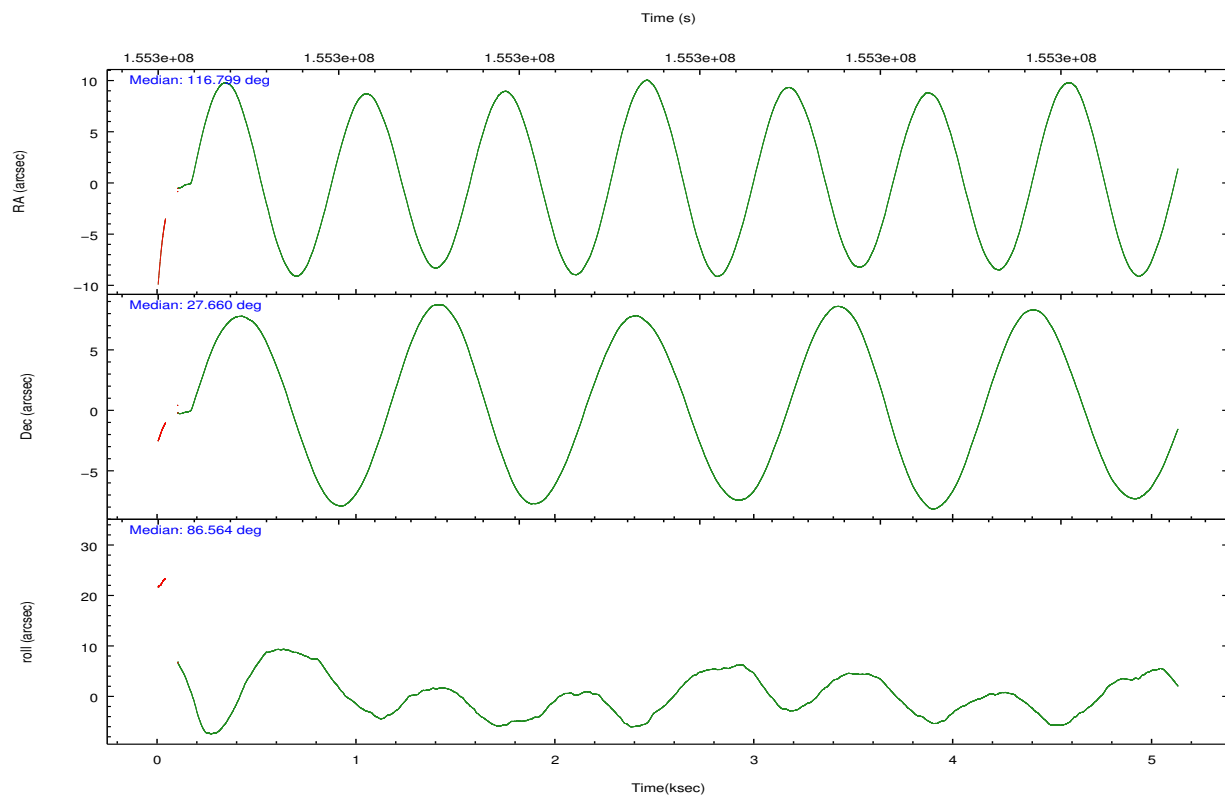
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 33801 | 32337 | 51745 | 34085 | 44764 | 41925 | grade 0 events | 1740 | 1591 | 3716 | 1564 | 1660 | 2903 |
| rejected events | 30070 | 28748 | 28602 | 30394 | 27398 | 33567 | | 5% | 4% | 7% | 4% | 3% | 6% |
| rejected % | 88% | 88% | 55% | 89% | 61% | 80% | grade 1 events | 14 | 17 | 213 | 19 | 44 | 29 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 827 | 749 | 7207 | 772 | 3624 | 1852 |
| | | | | | | | | 2% | 2% | 13% | 2% | 8% | 4% |
| | | | | | | | grade 3 events | 392 | 373 | 912 | 367 | 1629 | 929 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 380 | 388 | 896 | 388 | 1626 | 889 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 5 events | 1296 | 1385 | 3915 | 1485 | 4356 | 1938 |
| | | | | | | | | 3% | 4% | 7% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 592 | 688 | 11749 | 796 | 9808 | 2247 |
| | | | | | | | | 1% | 2% | 22% | 2% | 21% | 5% |
| | | | | | | | grade 7 events | 28560 | 27146 | 23137 | 28694 | 22017 | 31138 |
| | | | | | | | | 84% | 83% | 44% | 84% | 49% | 74% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 116.813335 | 116.7991635402441 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 27.636211 | 27.66038464601441 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 86.409859 | 86.573073045461 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 155298390.184000 | 155297260.62672 | | | |
| Observation start date | 2002-12-03T10:25:26 | 2002-12-03T10:07:40 | | | |
| [s] Observation end time (MET) | 155303390.184000 | 155304207.05201 | | | |
| Observation end date | 2002-12-03T11:48:46 | 2002-12-03T12:03:27 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



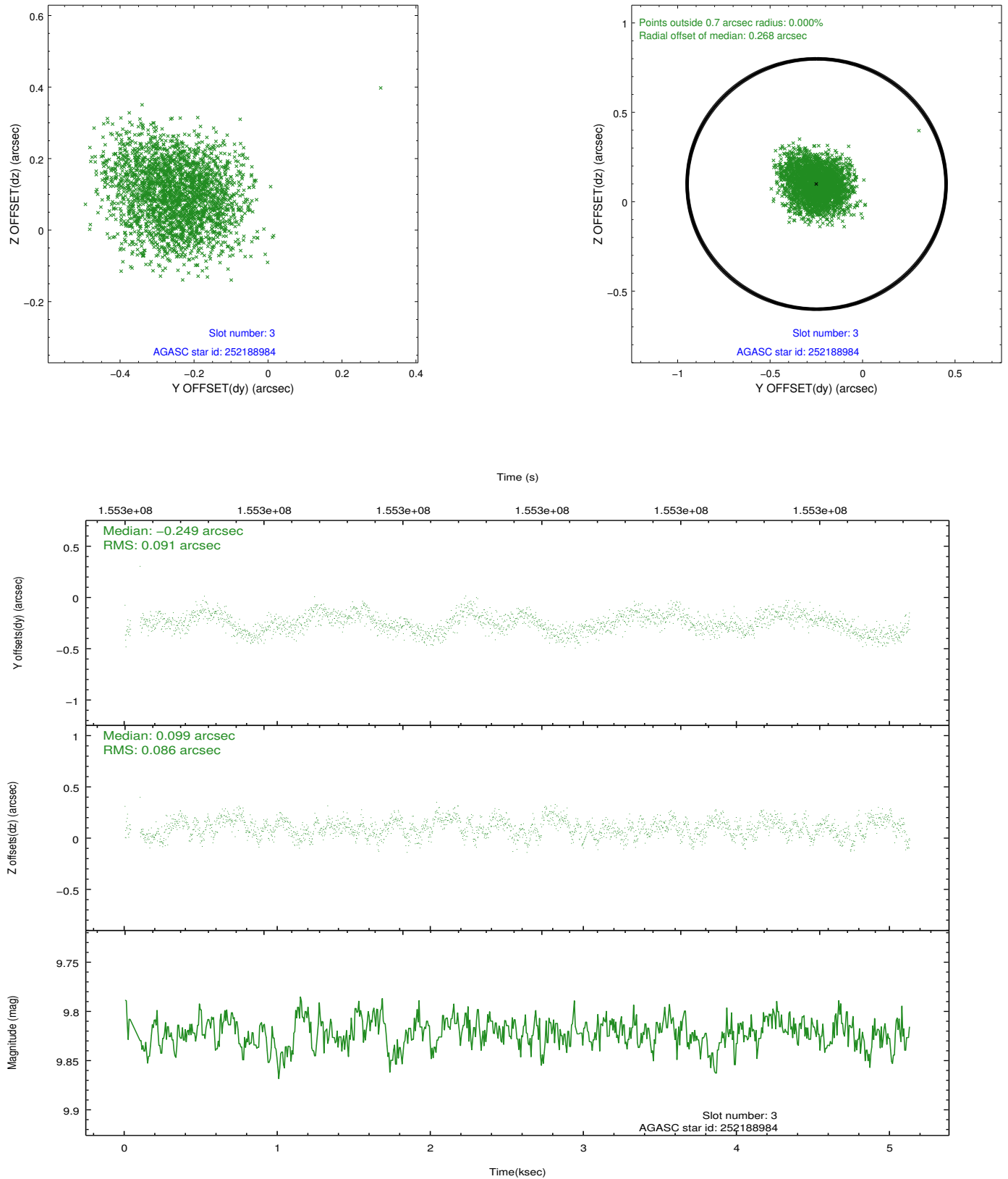


Slot Statistics

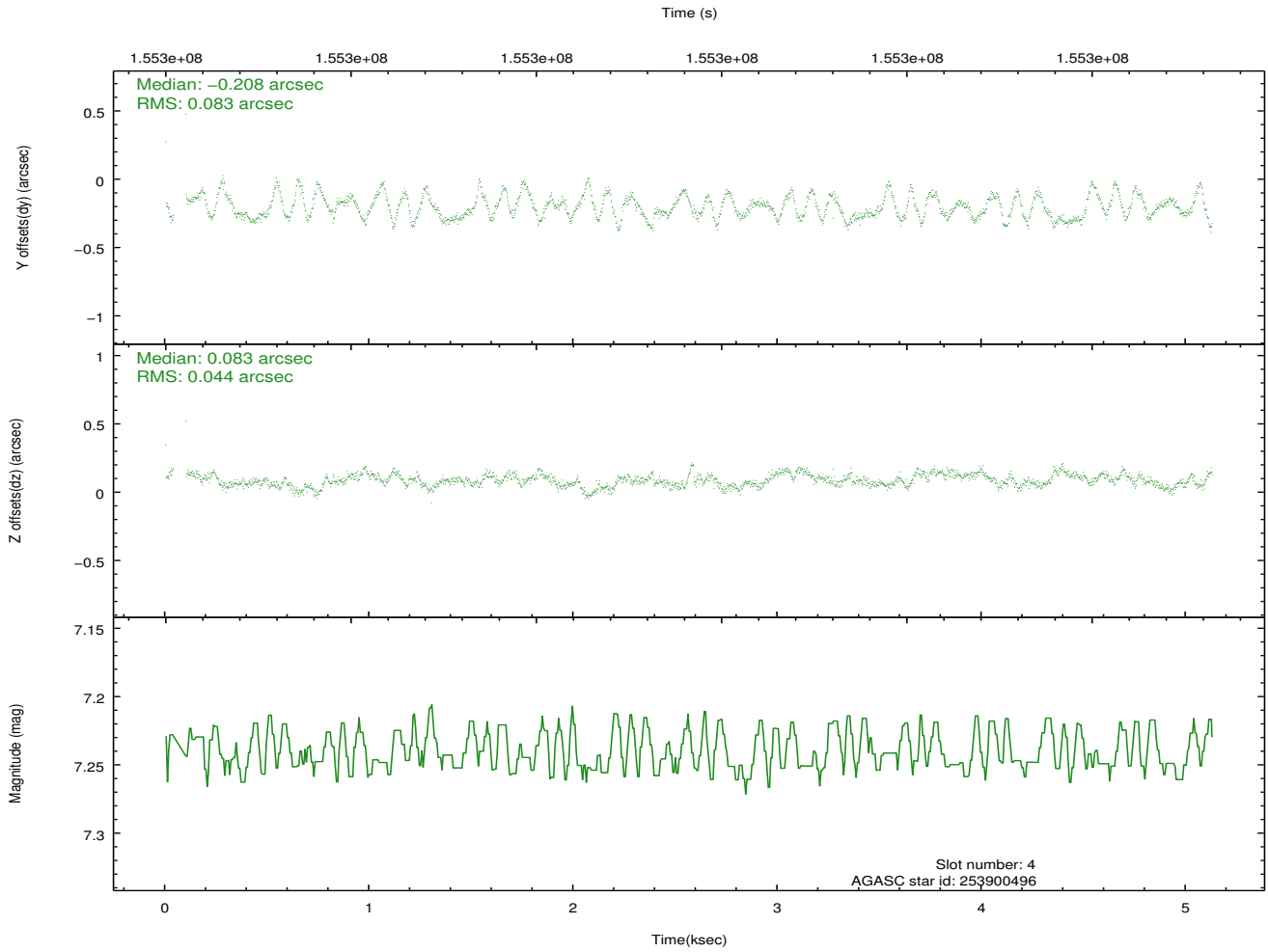
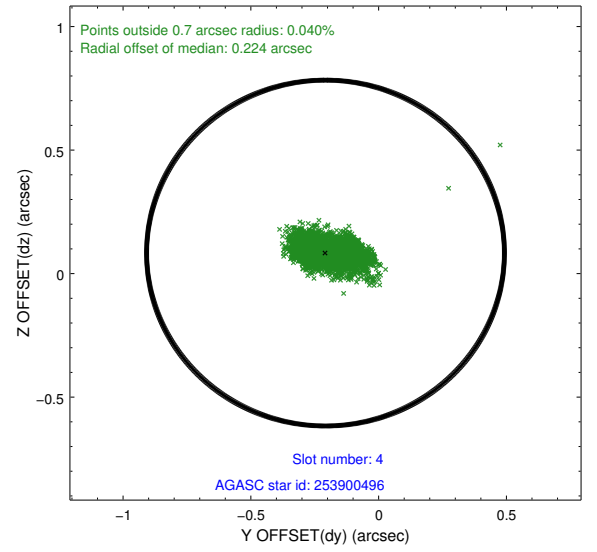
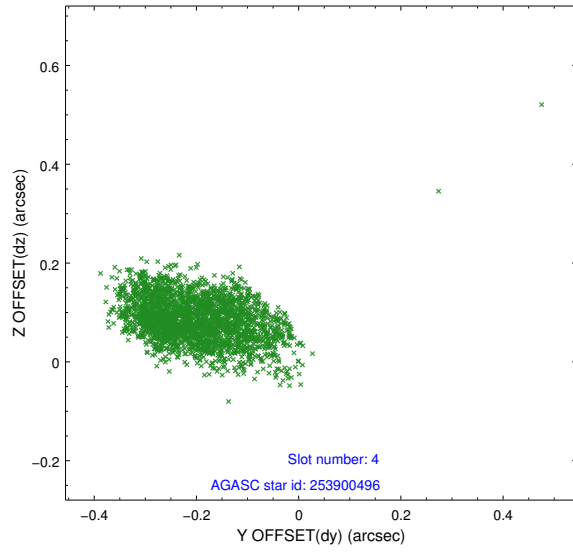
| | | | | | | | |
|--|--------|-----------|------|-------|--------|--------|-------|
| | status | id | mag | n_pts | med_dy | med_dz | drl |
| | FID | ACIS-S-2 | 7.11 | 1237 | -0.027 | -0.007 | 0.009 |
| | FID | ACIS-S-4 | 7.20 | 1237 | -0.006 | 0.015 | 0.007 |
| | FID | ACIS-S-5 | 7.24 | 1237 | 0.002 | 0.001 | 0.008 |
| | GUIDE | 252188984 | 9.82 | 2472 | -0.249 | 0.099 | 0.136 |
| | GUIDE | 253900496 | 7.24 | 2473 | -0.208 | 0.083 | 0.097 |
| | GUIDE | 251663200 | 9.49 | 2472 | 0.194 | -0.337 | 0.129 |
| | GUIDE | 251658496 | 9.59 | 2471 | 0.265 | 0.157 | 0.116 |
| 0.0000.0000.0000.0000000.00000000.000.00 | | | | | | | |

2.4 Star Slots

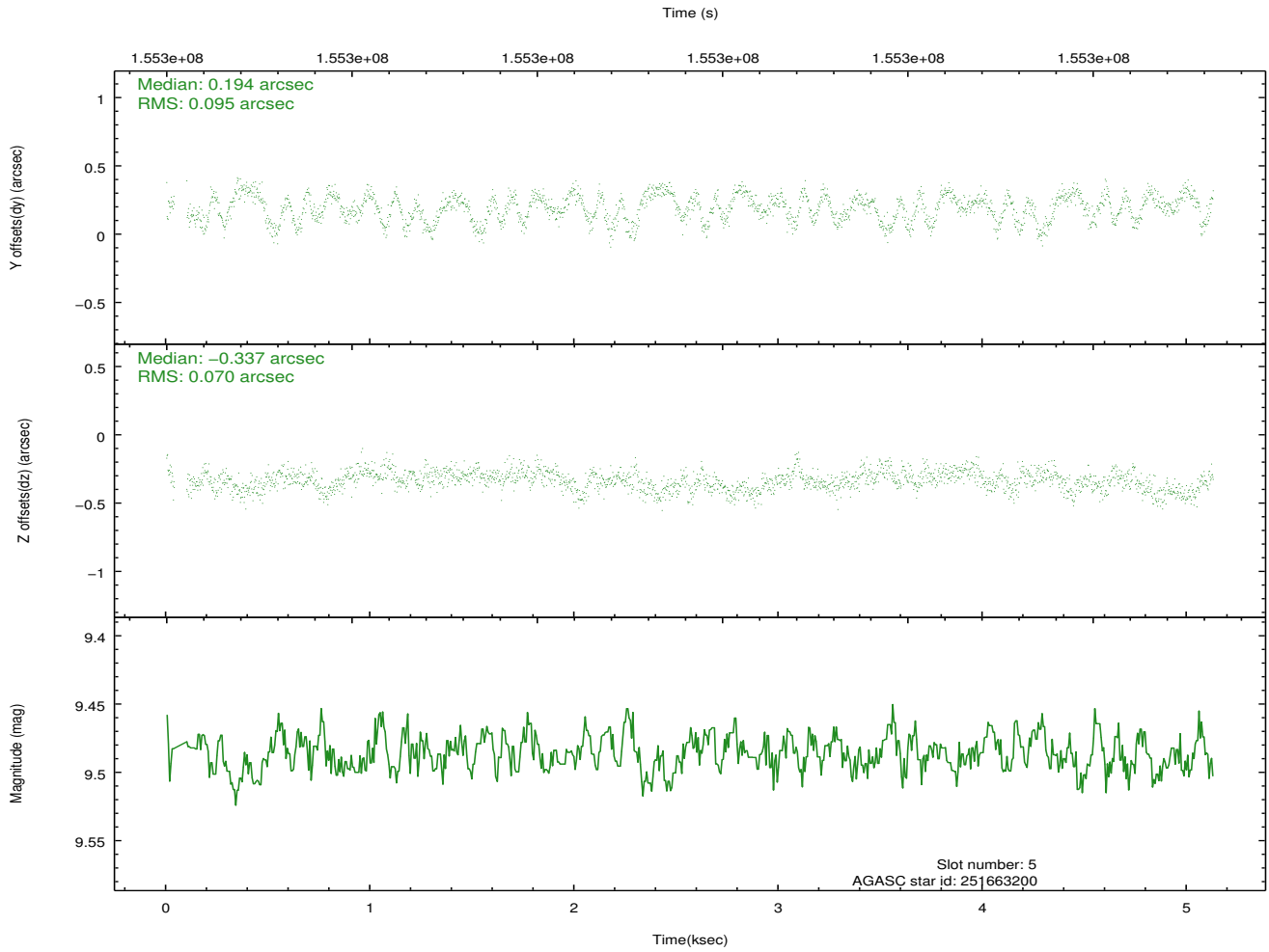
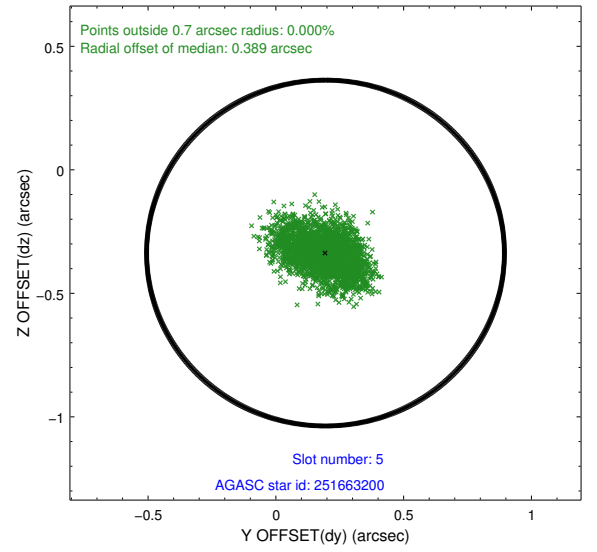
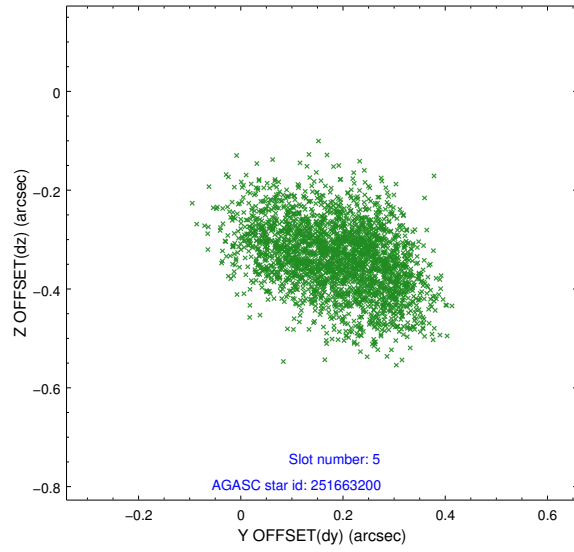
2.4.1 Slot 3



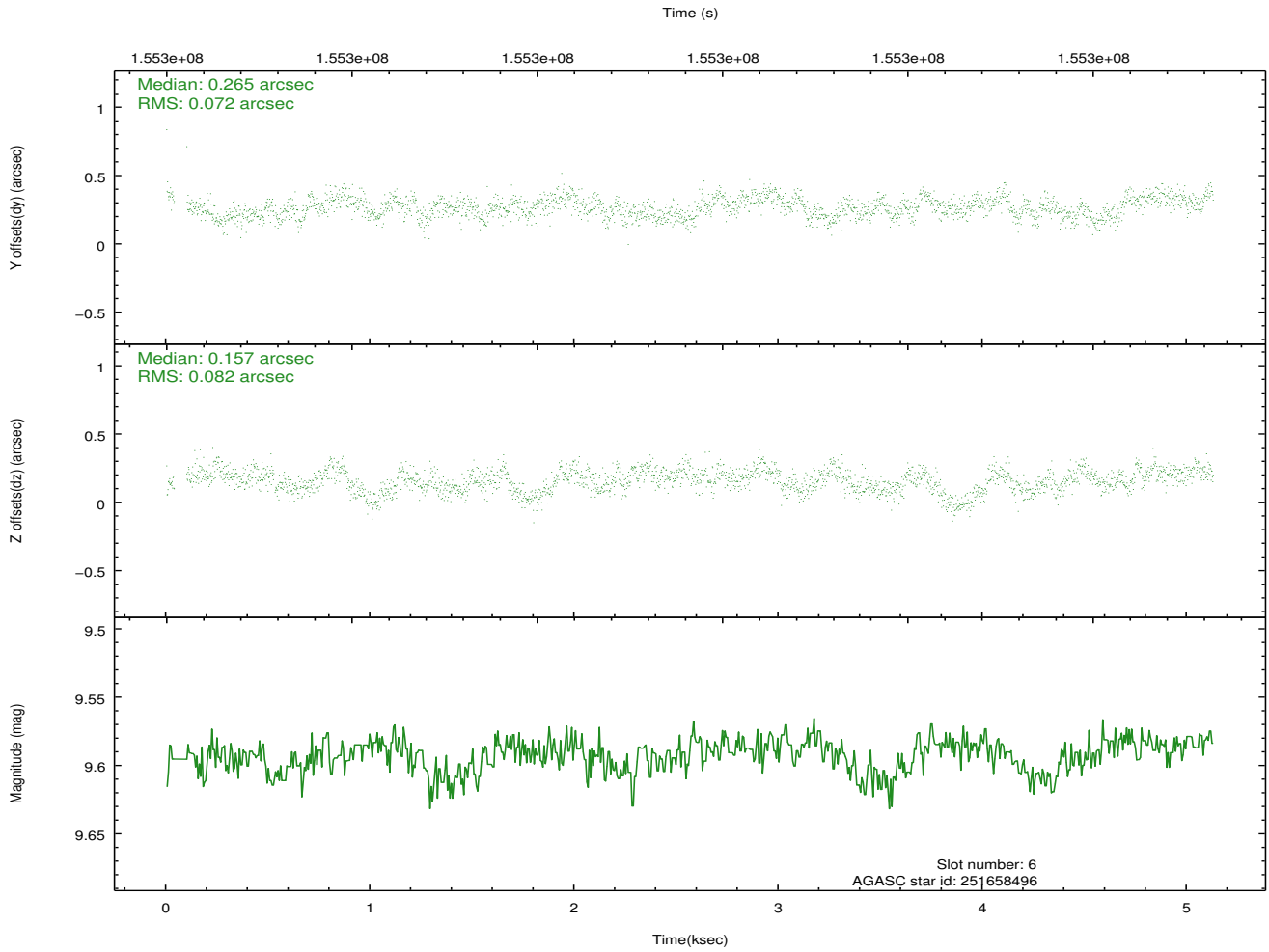
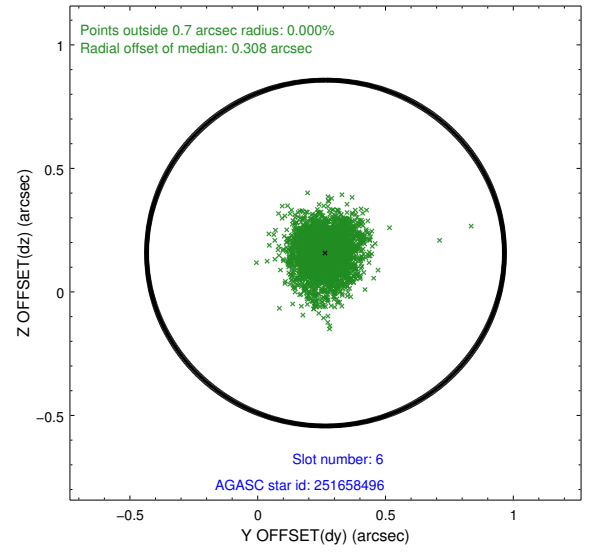
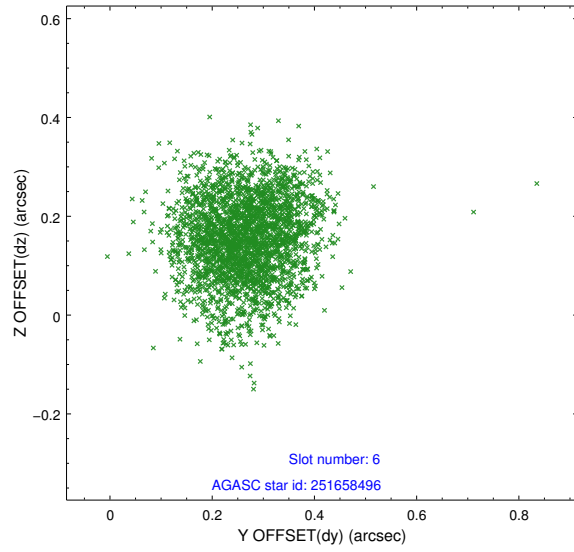
2.4.2 Slot 4



2.4.3 Slot 5

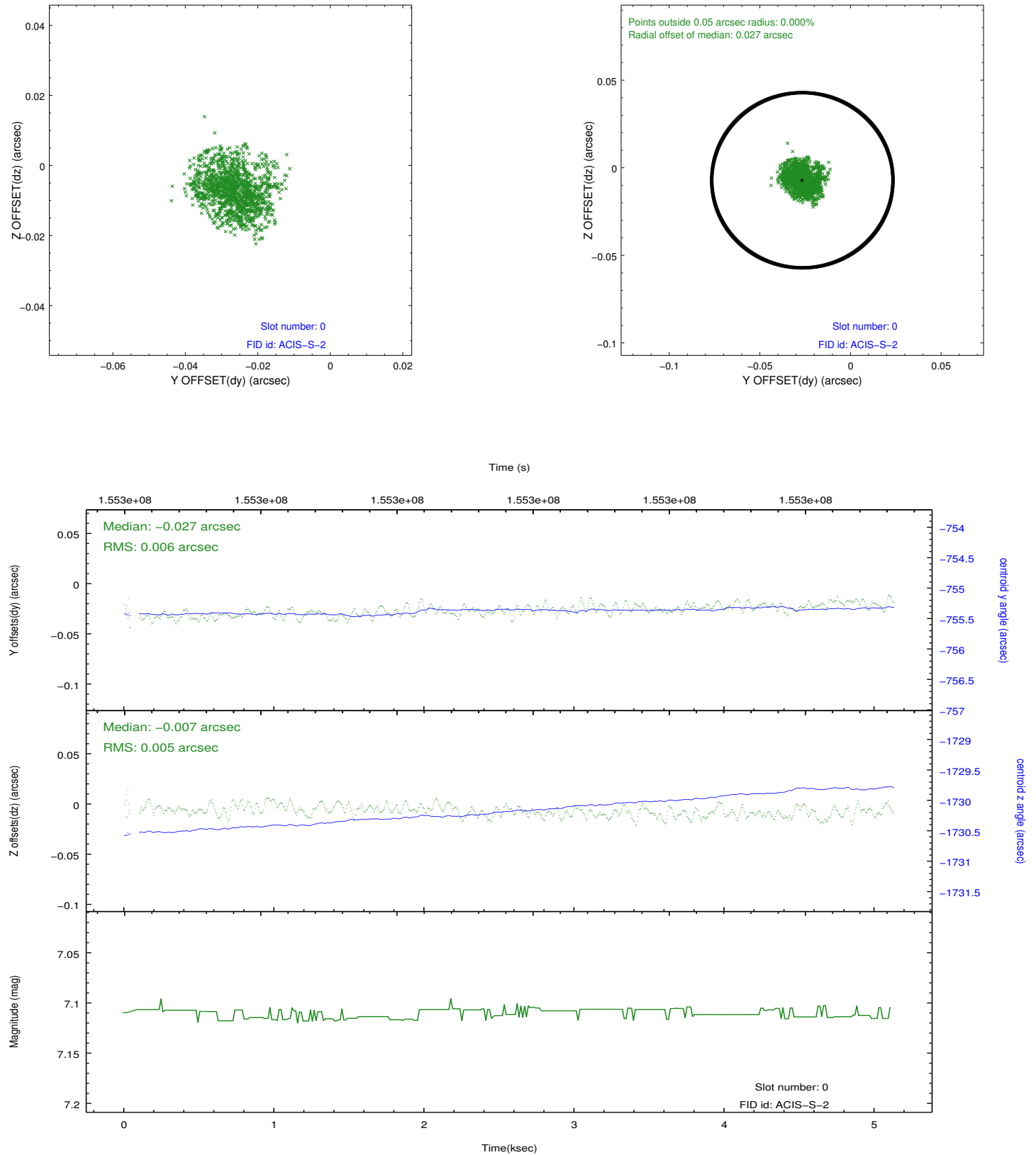


2.4.4 Slot 6

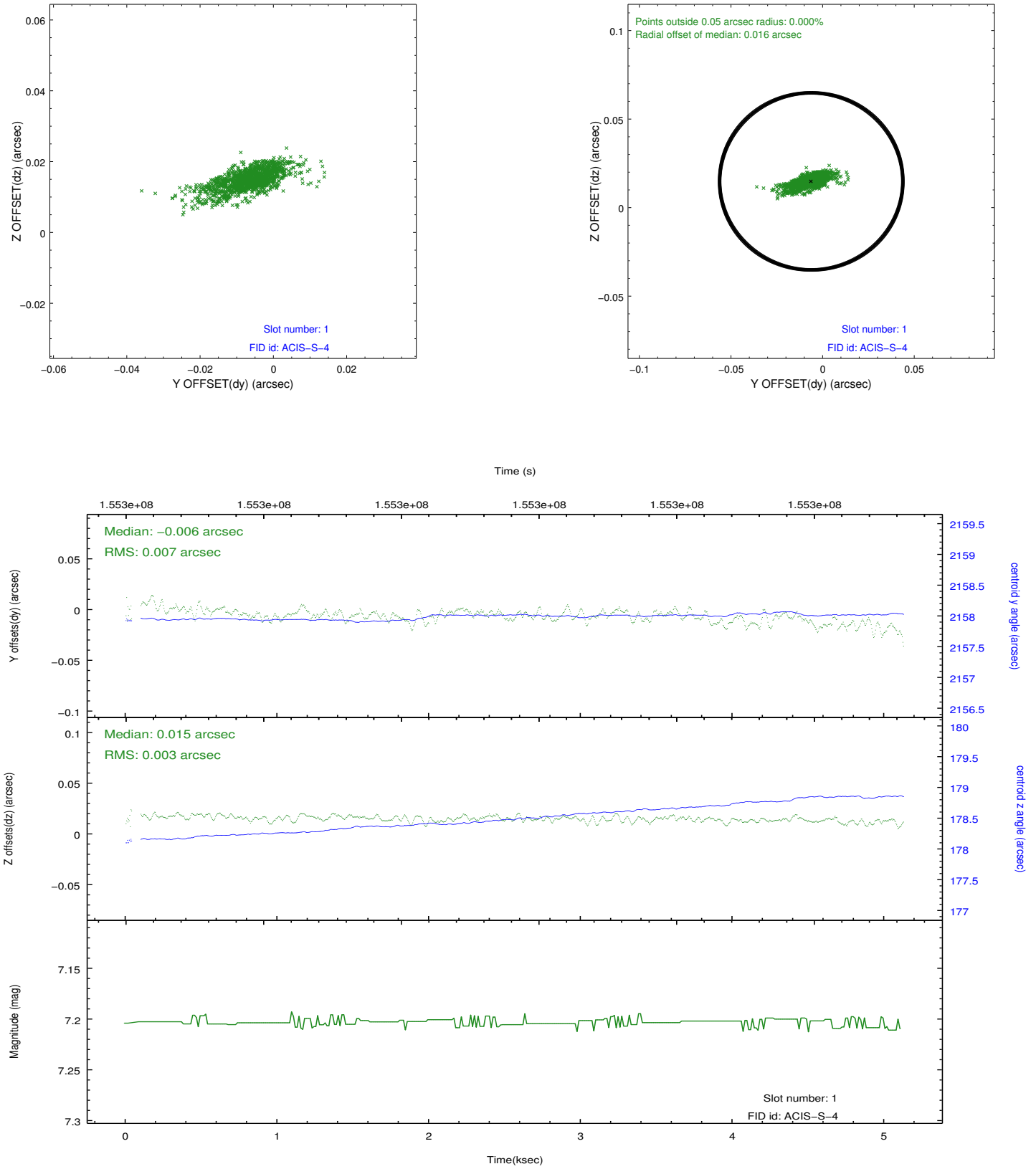


2.5 FID Slots

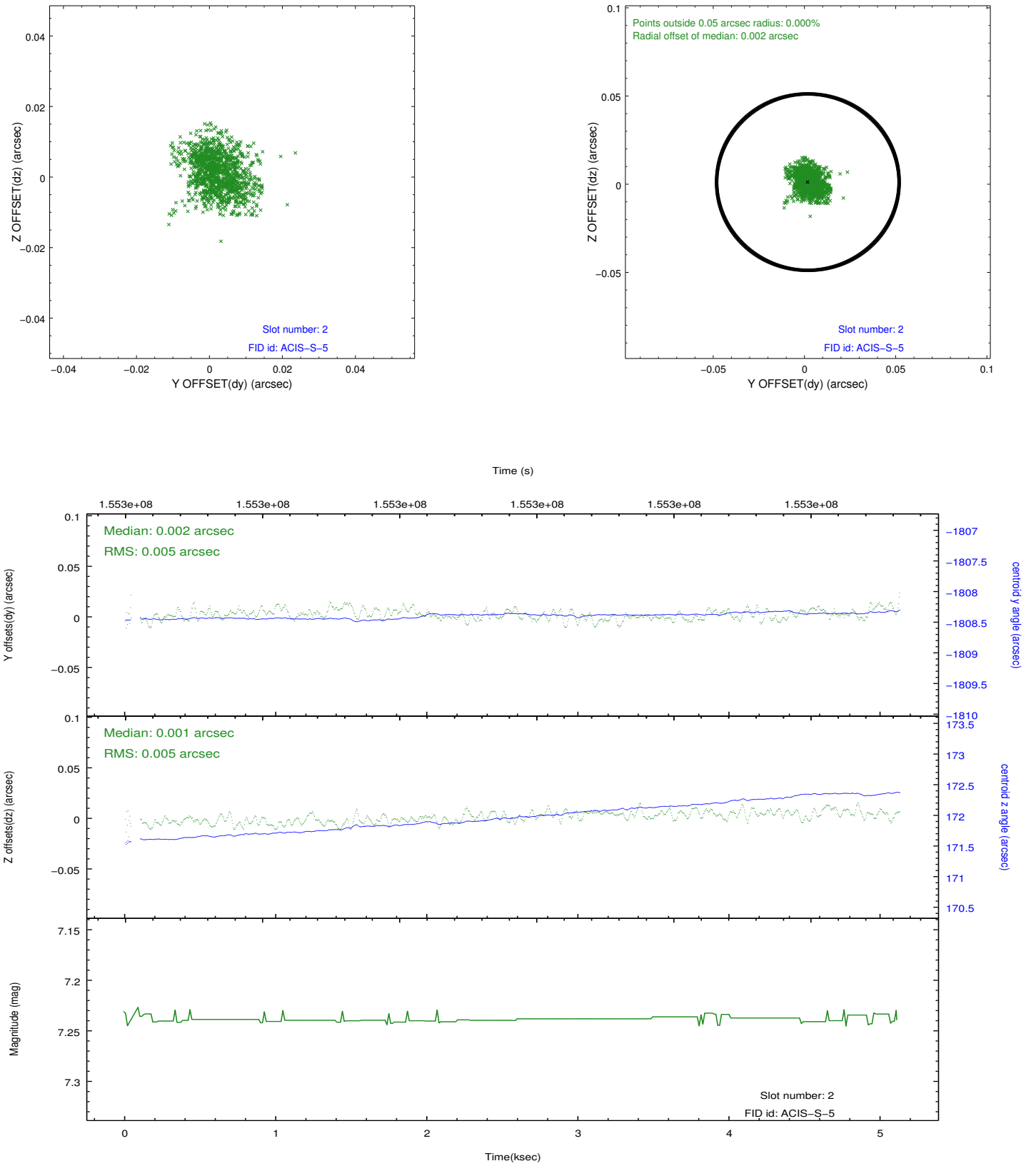
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.10.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.023 |

A.2 Comments